

REMARKS

Claims 1, 3 and 5-19 are pending in the present application. Claim 1 is herein amended. No new matter is added. In light of the foregoing amendments and the following remarks, Applicants earnestly solicit favorable reconsideration.

Notice of References Cited - Form PTO 892

Applicants note that the Takahashi (U.S. Patent No. 6,537,719) was not included in the Notice of References Cited. Applicants request the addition of Takahashi to the Notice of References Cited - Form PTO 892.

Claim Rejections - 35 U.S.C. §§ 102 and 103

Claims 1, 3, 5, 6, 8-15, 18 and 19 were rejected under 35 U.S.C. § 102(b) as being anticipated by **Kanda** (EP 1152036); claim 7 was rejected under 35 U.S.C. § 103(a) as being anticipated by **Kanda** in view of **Suzuki** (US 6,043,145); and claims 16 and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over **Kanda** in view of **Takahashi** (US 6,537,719) and **Tanaka** (US 6,555,617).

Favorable reconsideration is requested.

The present invention as recited in the claims aims to keep the size of the opening dimension D of the smoothed resist pattern as close as possible to the size of the opening according to an exposure process. Claim 1 has been amended to recite this feature.

Applicants respectfully submit that Kanda does not teach or suggest:

wherein a maximum opening dimension D_{\max} (nm) and a minimum opening dimension D_{\min} (nm) of the smoothed resist pattern are within a range of $\pm 5\%$ with respect to an opening dimension D (nm) of the resist pattern opening according to an exposure process, and

wherein the opening dimension D (nm) of the resist pattern, and an average opening dimension D_{av} (nm) of the smoothed resist pattern whose wall surfaces have been smoothed satisfy the relation expressed by:

$$D_{av} \text{ (nm)} \geq D \text{ (nm)} \times (90/100).$$

as recited in amended claim 1.

A significant feature of the present invention is to smooth an opening of the resist pattern with the least size change of the opening from the opening according to an exposure process, which is very difficult to achieve by Kanda's process.

Kanda discloses that the resist patterns such as trench patterns and hole patterns can be formed very close to the designed size, and a much reduced size from the opening according to a exposure process as shown in the Table 1. Thus, Kanda does not teach or suggest all of the elements as recited in amended claim 1.

Double Patenting Rejection

Claims 1-19 were provisionally rejected the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-21 of co-pending Application No. 10/290,493.

Applicants will address the provisional double patenting rejection once all other rejections have been withdrawn.

Application No.: 10/647,247
Art Unit: 1795

Amendment
Attorney Docket No.: 031029

For at least the foregoing reasons claim 1 is patentable over the cited references, and claims 3 and 5-19 are patentable by virtue of their dependence from claim 1. Accordingly, withdrawal of the rejection of claims 1, 3 and 5-19 is hereby solicited.

In view of the aforementioned amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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